CURRICULUM VITAE

Maria Paola Cecchini

Date of Birth: 11-05-1973

Place of Birth: Acqui Terme (AL) - Italy

Nationality: Italian

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1987-1992 High School "Liceo classico G.Parodi" of Acqui Terme (AL), Italy

AYs 1992/1993-1997/1998 University of Insubria (Varese), Faculty of Medicine, Italy

24 March 1999: Degree in Medicine

Thesis Topic: "The aetiological out-patient diagnosis of conjunctival chronic pathologies"

November 1999: University of Pavia, Italy

Qualifying examination to the practice of the medical profession. This certificate is acknowledged by the European Union, based on the Mandate 93/16/EU on April, 5th 1993, as it was modified by the Mandate 2001/19/EU

1999-2003: University of Insubria (Varese), Faculty of Medicine, Italy, Residency in Medical Genetic Thesis topic: "Shwachman syndrome as mutator phenotype responsible for myeloid dysplasies/neoplasms characterized by karyotype instability and anomalies of chromosomes 7 and 20: analysis of 13 cases".

During the Residency, she worked full time on researches in cytogenetics of hematological disorders and in the Shwachman-Diamond Syndrome. She also contributed with practical demonstrations in the Cytogenetics lab, following groups of students of the Medical Faculty

2007-2009: University of Verona, Faculty of Medicine, Section of Anatomy and Histology, Italy

PhD student in "Multimodal Imaging in Biomedicine", under the supervision of Prof. Andrea Sbarbati, Tutor: Prof. Maria Antonietta Bassetto. On 2010, April,14th she concluded the PhD with the thesis topic: "Sniffin' Sticks Extended test and olfactory event-related potentials (OERPs) for the evaluation of olfactory disorders"

In that period, she also followed the studies on chemoreception on major salivary glands using immunohistochemical techniques, under the supervision of Dr. Flavia Merigo.

Since January 2009, she is active in the clinical evaluation of olfaction and taste disorders with research activity at Verona University Hospital "G.B. Rossi" especially in cooperation with neurologists (particular research field: neurodegenerative diseases)

During the AYs 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, from February to May, she worked in the didactic program of Human Anatomy, Verona Faculty of Medicine, following the students with practical demonstrations in gross and microscopic anatomy

Moreover, in the same AYs, for one week every year, within a University Agreement, she attended a group of medical students at the Anatomy Department of Szeged Medical University in Hungary, directed by Prof. Myhàli Andràs, for practical demonstrations on cadavers and organs

September-December 2009: she worked as visiting scientist in the Department of Otorhinolaryngology, Smell and Taste Clinic at *Uniklinikum* of Dresden, Germany, under the direction of Prof. Thomas Hummel. There, she worked

for a pilot study on olfactory disorders in ischemic stroke using the OERPs (Olfactory Event Related Potentials) technique. She was also involved in *routine* clinical activity on patients with olfactory disorders (forensic medical cases, congenital or post-traumatic anosmia, neurological olfactory disorders...)

February 2010-April 2011: post-doctoral fellow at Anatomy and Histology Section, on: "Olfactory evaluation with Sniffin' Sticks-Extended test and Olfactory Event-Related Potentials (OERPs)"

March 2011-October 2011: she spent a period of outpatient treatment clinical activity, (oncological follow-up) in a freelance system, at the Medical Oncology Unit (Director: Dott. Andrea Bonetti), Mater Salutis Hospital, Legnago (Verona)

Since November 2011: Assistant Professor of Human Anatomy at the Anatomy and Histology Section, Department of Neurological, Biomedical and Movement Sciences, School of Medicine, University of Verona (Teaching: Human Anatomy at Degree in Nursing at Legnago Hospital and Human Microscopic Anatomy at School of Medicine of Verona University)

2012-2015: volunteer physician for the genetic counseling in familial breast and ovarian cancers at the Medical Oncology Unit (Director: Dott. Andrea Bonetti), Mater Salutis Hospital, Legnago (Verona)

Since 2016, she collaborated with a Research Agreement entitled "Studio clinico osservazionale prospettico per stimare la probabilità di mutazione dei geni BRCA sulla base della storia familiare di carcinoma mammario e ovarico in pazienti donne di età inferiore ai 50 anni seguite presso l'U.O.C. Oncologia Medica dell'Azienda ULSS 21 di Legnago, mediante il questionario Family History Screen 7 (FHS-7) come da protocollo FSH-7 AULSS21". Since September 2022, at the same Medical Oncology Unit, she collaborates with the Research Agreement on the participation in a diagnostic and therapeutic protocol development (PDTA) for the management of patients with hereditary syndromes predisposed to the development of tumors (2022-2024)

Call 2021/2023 (Ministerial Decree n.553/2021 and 589/2021)-disciplinary field of 05/H1-Human Anatomy: she achieved the National Scientific qualification as Associate Professor. Validity: 01/06/2022-01/06/2034

Publications

Minelli A., Maserati E, Rossi G, Bernardo ME, De Stefano P, Cecchini MP, Valli R, Albano V, Pievani P, Leszl A, Sainati L, Lo Curto F, Danesino C, Locatelli F and Pasquali F.

Familial platelet disorder with propensity to acute myelogenous leukemia: genetic heterogeneity and progression to leukemia via acquisition of clonal chromosomes anomalies. *Genes, Chromosomes & Cancer* 40:165-171 (2004)

Maserati E, Minelli A, Menna G, **Cecchini MP**, Bernardo ME, Rossi G, De Filippi P, Lo Curto F, Danesino C, Locatelli F, Pasquali Familial myelodysplastic syndrome, monosomy 7/trisomy 8, and mutator effects *Cancer Genetics and Cytogenetics* 148:155-158 (2004)

Sbarbati A, Tizzano M, Merigo F, Benati D, Nicolato E, Boschi F, Cecchini MP, Scambi I, Osculati F. Acyl homoserine lactones induce early response in the airway *Anat Rec* (Hoboken) 292:439-448 (2009)

Merigo F, Benati D, Cecchini MP, Cristofoletti M, Osculati F, Sbarbati A. Amylase expression in taste receptor cells of rat circumvallate papillae *Cell Tissue Res* 336:411-421 (2009)

Cecchini MP, Merigo F, Cristofoletti M, Osculati F, Sbarbati A.

Immunohistochemical localization of Clara cell secretory proteins (CC10-CC26) and Annexin-1 protein in rat major salivary glands *J Anat* 214:752-758 (2009)

Bovi T, Antonini A, Ottaviani A, Antonioli A, Cecchini MP, Di Francesco V, Bassetto MA, Zamboni M, Fiaschi A, Moretto G, Sbarbati A, Osculati F, Tinazzi M. The status of olfactory function and the striatal dopaminergic system in drug-induced parkinsonism *J Neurol* 257(11):1882-9 Epub 2010 Jul 16. Erratum in: J Neurol, Dec;257(12):2122 (2010)

Merkonidis C, Gudziol V, Cecchini M, Gerber J, Seo HS, Bachert C, Hummel T. Improvement of chronic rhinitis under Aspirin *Respir Care* 57(3):460-3 (2012)

Cecchini MP, Bojánowski V, Bodechtel U, Hummel T, Haener A.

Olfactory function in patients with ischemic stroke: a pilot study Eur Arch Otorhinolaryngol 269(4):1149-53 (2012)

Cecchini MP, Pellegrini C, Bassetto MA, Osculati F, Sbarbati A, Marcolini L, Pegoraro M, Fontana R. Might Helicobacter pylori infection be associated with distortion on taste perception? *Med Hypotheses* 81(3):496-9 (2013)

Boschi F, Pagliazzi M, Rossi B, Cecchini MP, Gorgoni G, Salgarello M, Spinelli AE. Small-animal radionuclide luminescence imaging of thyroid and salivary glands with Tc99m-pertechnetate *J Biomed Opt* 18(7):76005 (2013)

Cecchini MP, Parnigotto M, Merigo F, Marzola P, Daducci A, Tambalo S, Boschi F, Colombo L, Sbarbati A 3D printing of rat salivary glands: The submandibular-sublingual complex. *Anat Histol Embryol* 43(3):239-44 **(2014)**

Cecchini MP, Osculati F, Ottaviani S, Boschi F, Fasano A, Tinazzi M. Taste performance in Parkinson's disease. *J Neural Transm* 121(2):119-22 (2014)

Cecchini MP, Fasano A, Boschi F, Osculati F, Tinazzi M. Taste in Parkinson's disease *J Neurol*, 262(4):806-13 (2015)

Cecchini MP, Viviani D, Sandri M, Hähner A, Hummel T, Zancanaro C. Olfaction in the Down syndrome: a comprehensive assessment across four decades of age. *PLOSone* 5:1-13 (2016)

Ricatti J, Ottaviani S, Boschi F, Fasano A, Tinazzi M, Cecchini MP. A prospective evaluation of taste in Parkinson's disease. *J Neural Transm* 124: 347-352 (2017)

Masala C, Saba L, Cecchini MP, Solla P, Loy F. Olfactory function and age: a Sniffin'Sticks Extended test study performed in Sardinia. *Chem Percept* 11(1):19-26 (2018)

Cecchini MP, Cardobi N, Sbarbati A, Monaco S, Tinazzi M, Tamburin S. Post-traumatic taste disorders: a case series. *J Neurol* 265(4): 836-844 (2018)

Kotzbeck P, Giordano A, Mondini E, Murano I, Severi I, Venema W, Cecchini MP, Kershaw EE, Barbatelli G, Haemmerle G, Zechner R, Cinti S. Brown adipose tissue whitening leads to brown adipocyte death and adipose tissue inflammation. *J Lipid Res* 59(5):784-794 (2018)

Cecchini MP, Knaapila A, Hoffmann E, Boschi F, Hummel T, Iannilli E. A cross-cultural survey of umami familiarity in European countries. *Food Quality and Preference* 74:172-178 (2019)

Remo A, Cecchini MP, Benati D, Bernardi P, Manfrin E, Giordano G, Bonomi F, Parcesepe P, Fassan M, Colombari R, Sbarbati A, Pancione M. CROCC-mutated rhabdoid colorectal carcinoma showing in intercellular spaces lamellipodia and cellular projections revealed by electron microscopy. *Virchows Archiv* 475(2):245-249

(2019)

Cecchini MP, Federico A, Zanini A, Mantovani E, Masala C, Tinazzi M, Tamburin S. Olfaction and taste in Parkinson's disease: the association with mild cognitive impairment and the single cognitive domain dysfunction. *J Neural Trasm* 126(5):585-595 (2019)

Lasconi C, Pifferi S, Hernandez-Clavijo A, Merigo F, Cecchini MP, Gonzalez-Velandia KY, Agostinelli E, Sbarbati A, Menini A. Bitter tastants and artificial sweeteners activate a subset of epithelial cells in acute tissue slices of the rat trachea. *Sci Rep* 9(1):8834 (2019)

Riello M, Cecchini MP, Zanini A, Di Chiappari M, Tinazzi M, Fiorio M. Perception of phasic pain is modulated by smell and taste. *Eur J Pain* 23(10):1790-1800 (2019)

Iannilli E, Knaapila A, Cecchini MP, Hummel T. Dataset of verbal evaluation of umami taste in Europe. *Data in Brief* 7;28:105102 (2020)

Brozzetti L, Sacchetto L, Cecchini MP, Avesani A, Perra D, Bongianni M, Portioli C, Scupoli M, Ghetti B, Monaco S, Buffelli M, Zanusso G. Neurodegeneration-associated proteins in human olfactory neurons collected by nasal brushing. *Front in Neurosci* 5;14:145 (2020)

Cecchini MP, Riello M, Sandri A, Zanini A, Fiorio M, Tinazzi M. Smell and taste dissociations in the modulation of tonic pain perception induced by a capsaicin cream application. *Eur J Pain under revision* (2020)

Cecchini MP, Tamburin S, Zanini A, Boschi F, Demartini B, Goeta D, Dallocchio C, Marotta A, Fiorio M, Tinazzi M. Hedonicity in functional motor disorders: a chemosensory study assessing taste. *J Neural Transm*, 127(10):1399-1407 **(2020)**

Cecchini MP, Mantovani E, Federico A, Zanini A, Ottaviani S, Masala C, Tinazzi M, Tamburin S. Olfaction in patients with Parkinson's disease: a new threshold test analysis through turning points trajectories. *J Neural Transm* (Vienna), 128: 1641-1653. doi: 10.1007/s00702-021-02387-z. (2021)

Sandri A, Cecchini MP, Riello M, Zanini A, Nocini R, Fiorio M, Tinazzi M. Pain, Smell, and Taste in Adults: A Narrative Review of Multisensory Perception and Interaction. *Pain Ther*, 10(1):245-268. doi: 10.1007/s40122-021-00247-y (2021)

Cecchetto C, Di Pizio A, Genovese F, Calcinoni O, Macchi A, Dunkel A, Ohla K, Spinelli S, Farruggia MC, Joseph PV, Menini A, Cantone E, Dinella C, Cecchini MP, D'Errico A, Mucignat-Carretta C, Parma V, Di Battista M. Assessing the extent and timing of chemosensory impairments during COVID-19 pandemic. *Sci Rep*, 11(1):17504. doi: 10.1038/s41598-021-96987-0 (2021)

Stefani A, Iranzo A, Holzknecht E, Perra D, Bongianni M, Gaig C, Heim B, Serradell M, Sacchetto L, Garrido A, Capaldi S, Sanchez-Gomez A, Cecchini MP, Mariotto S, Ferrari S, Fiorini M, Schmutzhard J, Cocchiara P, Vilaseca I, Brozzetti L, Monaco S, Marti MJ, Seppi K, Tolosa E, Santamaria J, Högl B, Poewe W, Zanusso G. Alphasynuclein seeds in olfactory mucosa of isolated rapid-eye-movement sleep behaviour disorder. *Brain*, 144(4):1118-1126 (2021)

Cecchini MP, Brozzetti L, Cardobi N, Sacchetto L, Gibellini D, Montemezzi S, Cheli M, Manganotti P, Monaco S, Zanusso G. Persistent chemosensory dysfunction in a young patient with mild COVID-19 with partial recovery 15 months after the onset. *Neurol Sci*, 43(1):99-104 doi: 10.1007/s10072-021-05635-y **(2022)**

Masala C, Cavazzana A, Sanna F, Cecchini MP, Zanini A, Gasperi F, Menghi L, Endrizzi I, Borgogno M, Drago M, Cantone S, Ciofalo A, Macchi A, Monti G, Parma V, Piochi M, Pinna I, Tirri L, Cabrino G, Ottaviano G, Pendolino AL, Pignatelli A, Pighin F, Bochiccio V, Motta G, Fontana G, Pasquariello B, Cavaliere C, Iacono V, Hummel T.

Correlation between olfactory function, age, sex, and cognitive reserve index in the Italian population. *Eur Arch Otorhinolaryngol*, 24 February, 1-10 doi: 10.1007/s00405-022-07311-z (2022)

Sandri A, Cecchini MP, Zanini A, Nocini R, Boschi F, Zanette G, Marcon A, Fiorio M, Tinazzi M Unpleasant olfactory and gustatory stimuli increase pain unpleasantness in patients with chronic oral burning pain: an exploratory study. *Eur J Pain*, vol. First published online: 12 March 2022, p. N/A, doi: 10.1002/ejp.1933 (2022)

Bongianni M, Catalan M, Perra D, Fontana E, Janes F, Bertolotti C, Sacchetto L, Capaldi S, Tagliapietra M, Polverino P, Tommasini V, Bellavita G, Kachoie EA, Baruca R, Bernardini A, Valente M, Fiorini M, Bronzato E, Tamburin S, Bertolasi L, Brozzetti L, **Cecchini MP**, Gigli G, Monaco S, Manganotti P, Zanusso G. Olfactory swab sampling optimization for α-synuclein aggregate detection in patients with Parkinson's disease. *Transl Neurodegener*, Jul 28;11(1):37, doi: doi: 10.1186/s40035-022-00311-3 (2022)

Brozzetti L, Scambi I, Bertoldi L, Zanini A, Malacrida G, Sacchetto L, Baldassa L, Benvenuto G, Mariotti R, Zanusso G, Cecchini MP. RNAseq analysis of olfactory neuroepithelium cytological samples in individuals with Down syndrome compared to euploid controls: a pilot study. *Neurol Sci*, 44(3):919-930 (2023)

Ricatti MJ, Savazzi S, Cesari P, Cecchini MP. Olfaction and gustation in blindness: a state of the art of the literature. *Neurol Sci*, 44(7):2251-2263 (2023)

Remo A, Grillo F, Mastracci L, Simbolo M, Fassan M, Cecchini MP, Miscio G, Sassano A, Parente P, Vanoli A, Sabella G, Giordano G, Urso ED, Cerulo L, Scarpa A, Fiorica F, Pancione M. Loss of Primary Cilia Potentiates BRAF/MAPK Pathway Activation in Rhabdoid Colorectal Carcinoma: A Series of 21 Cases Showing Ciliary Rootlet CoiledCoil (CROCC) Alterations. *Genes* (Basel), 14(5):984 (2023)

Mantovani E, Zanini A, Cecchini MP*, Tamburin S*. The Association between neurocognitive disorders and gustatory dysfunction: A systematic review and meta-analysis. *Neuropsychol Rev*, 34(1):192-213 (2024) *equal contribution

Fontana E, Bongianni M, Benussi A, Bronzato E, Scialo C, Sacchetto L, Cagnin A, Castriciano S, Buratti E, Gardoni F, Italia M, Schreiber A, Ferracin C, Fiorini M, Newell KL, Cracco L, Garringer HJ, **Cecchini MP**, Polymenidou M, Padovani A, Monaco S, Legname G, Ghetti B, Borroni B, Zanusso G. Detection of TDP-43 seeding activity in the olfactory mucosa from patients with frontotemporal dementia. *Alzheimer's Dement*, 20(2):1156-1165 (2024)

Cecchini MP, Pizzini FB, Boschi F, Marcon A, Moro L, Gordon E, Guizard N, Cavedo E, Ricatti MJ, Veronese S, Tamburin S, Tinazzi M, Mansueto G, Sbarbati A. Long-term effects of SARS-CoV_2 infection in patients with and without chemosensory disorders at disease onset: a psychophysical and magnetic resonance imaging exploratory study. *Neurol Sci*, 45(6):2409-2418 (2024)

Gentilotti E, Gorska A, Cecchini MP[#], Mirandola M, Meroi M, De Nardo P, Sartori A, Konishi De Toffoli C, Kumar-Singh S, Zanusso G, Monaco S, Tacconelli E. Chemosensory assessment and impact on quality of life in neurosensorial cluster of the post COVID 19 syndrome. *Sci Rep*, Sep 9;14(1):20951 (2024) [#]corresponding author

Books chapters

- Sbarbati A, Cecchini MP, Crescimanno C, Merigo F, Benati D, Tizzano M and Osculati F. The solitary chemosensory cells the airways of mammals, Chapter of the Book: "Airway Chemoreceptors in the Vertebrates, Structure, Evolution and Function", Team of Editors: G. Zaccone, E. Cutz, D. Adriansen, C. Nurse, A. Mauceri, Editing House: Science Publisher, Enfield, N.H. U.S.A. (31-07-2009)
- ➤ Hummel T, Iannilli E, Gudziol V, Cecchini MP, Zucco GM Olfactory impairment in sinonasal disease. In: Ferrario F (ed) Update in tema di patologia ostruttiva dei turbinati. XXXIV Convegno Nazionale di Aggiornamento. Associazione Otorinolaringoiatri Ospedalieri Italiani, Verona, pp. 161-177 (2010)

> Co-author of the book "Anatomia Microscopica e diagnosi differenziale d'organo." Cecchini MP, Marmiroli L, Protasoni M, Rezzani R, Rodella LF. EdiSES UNIVERSITA' S.r.l., Napoli, (2020)

Research Grants participation

PRIN 2010-2011: Contributor to the project "Integrated analysis of molecular and cellular processes responsible for the processing of sensory signals under normal and pathological conditions" at the University of Verona. Project local manager: Prof. Carlo Zancanaro; National Scientific Coordinator: Prof. Anna Maria Menini, Advanced International School of Advanced Studies in Trieste. Outcome: FUNDED. (Partly published in: Cecchini et al., 2016, PLOS ONE)

2012: Research Clinical Reference Researcher for the project submitted to the "Fondation Jérôme Lejeune" in Paris entitled "The Smell in Down syndrome: An Experimental and Clinical Approach". Scientific Director: Prof. Carlo Zancanaro. Outcome: FINANCED (Grant agreement: 23/07/2012) Paper published (Cecchini et al., 2016, PLOS ONE)

2014: participant in a multicenter international project with leading "Smell & Taste Clinic" in Dresden, Germany, entitled "Categorical evaluation of Umami perception in various countries" (Germany, Italy, Finland). No financial support. Paper published (Cecchini et al., 2019, Food Quality and Preference)

2015/2016: Applicant at the Alzheimer's Association (Chicago, USA) under the New Investigator Research Grant program with a project entitled "Preclinical Markers of Neurodegeneration in Down Syndrome Olfactory Mucosal". Outcome: evaluated positively but not funded

2016-2019: Project manager of a University of Verona "Joint Project" entitled "Profiling of olfactory receptor genes expression in Down syndrome olfactory neurons" in collaboration with BMR Genomics, Padua. Outcome: FUNDED. (Brozzetti et al., 2022, Neurological Sciences).

2018: Scientific Responsibility for the Veneto country in a multicenter international project entitled:

"Olfactory evaluation in the Italian population". Promoting investigators: Prof. Thomas Hummel, Dr. Annachiara Cavazzana (Smell and Taste Clinic, Dresden, Germany), Dr. Carla Masala (Dip. Scienze Biomediche, Università di Cagliari) ed il Dr. Giancarlo Ottaviano (Dip. Di Neuroscienze, Università di Padova). The project was approved by the Ethical Commettee of University of Verona (CARU) on March, 14th, 2018 (Masala et al., 2022, Eur Arch Otorhinolaryngol)

2019-ongoing: participant to the "CARIVERONA Ricerca scientifica di eccellenza" project entitled: "Development and validation of a novel molecular assay for alpha-synuclein in olfactory brushing of patients with Parkinson disease and other alpha-synucleinopathies". Principal investigator: Prof. Gianluigi Zanusso, Neurology Unit, University of Verona. Outcome: FUNDED. (Bongianni et al., 2022, Translational Neurodegeneration)

2019-ongoing: participant to the "CARIVERONA Ricerca scientifica di eccellenza" project entitled: "The ciliary neurotrophic factor: a possible novel regulator of body weight and energy balance in mammals". Principal investigator: Prof. Antonio Giordano, Anatomy Section; Università Politecnica delle Marche. Outcome: FUNDED

Referee Activities: Archives of Oral Biology, Elite Research Journal, European Journal of Gastroenterology & Hepatology, Medical Hypotheses, European Journal of Histochemistry, The Anatomical Record, Tissue & Cell, European Archives of Psychiatry and Clinical Neuroscience, Brain Imaging and Behavior, Brain and Behavior, Journal of Neurology, Movement Disorders, Frontiers in Neuroscience, Frontiers in Systems Neuroscience, Nutrition Metabolism and Cardiovascular Diseases, Scientific Reports

<u>Editorial Board member</u> as *Review editor* for Frontiers in Neuroscience (invited by Prof. Martin Witt, Anatomy Department, Rostock, Germany, since 2020, April)

<u>Scientific board member of the PhD</u> in "Neuroscience, Psychological and Psychiatric Sciences, and Movement Sciences", Verona University. Teaching activity: "The anatomy of the human olfactory system"

Affiliations

SIAI member (Società Italiana di Anatomia e Istologia)

ECRO member (European Chemoreception Research Organization) In addition, since 2022 member of the "ECRO clinical liason group" directed by Prof. Thomas Hummel, Dresden University, Germany (The ECRO clinical liaison group consists of ECRO members who are experienced researchers with a strong interest in clinical olfaction. The multidisciplinary group is meant to counsel ECRO in terms of the clinical session that are typically added to the annual ECRO conferences. The group also acts as the basis other clinical initiatives that can be made corresponding for possible https://www.ecro.online/home/special-interest-groups/clinical-research/)

GCCR member (Global Consortium of Chemosensory Researchers)

INN member (Istituto Nazionale di Neuroscienze)

Languages

- English
- •Modern Greek (Certificate issued by the School of Philosophy, Faculty of Philology, Department of Linguistics, National and Kapodistrian University of Athens, on 08-06-2005)

Verona, September 1st 2025

Maria Paola Cecchini

Dati personali: Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".